

In the Claims

1 1. [Previously Presented] A laser scanning apparatus comprising:
2 a light source configured to generate a single light beam;
3 a scanning device optically coupled with the light source and configured
4 to scan the light beam along a photoconductor in a plurality of scan lines; and
5 a start-of-scan detector assembly configured to sample the single light
6 beam and initiate a start-of-scan operation of one of the scan lines of
7 information to be written on the photoconductor, and wherein only the sampled
8 single light beam is used to control a drive level of the light source.

1 2. [Original] The apparatus of claim 1, further comprising:
2 a control system configured to receive a signal from the detector
3 assembly and to control the drive level of the light source based on the signal.

1 3. [Previously Presented] The apparatus of claim 2, wherein the control
2 system comprises processing circuitry configured to compare an indication of
3 the sampled single light beam from the signal with a predetermined value.

1 4. [Original] The apparatus of claim 2, wherein the control system is
2 configured to maintain the drive level of the light source at a predetermined drive
3 level during scanning of the one scan line.

1 5. [Original] The apparatus of claim 1, wherein the light source
2 comprises a vertical cavity surface emitting laser diode (VCSEL).

1 6. [Original] The apparatus of claim 1, wherein the light beam is sampled
2 only once per scan line of information written on the photoconductor, and the
3 light beam is sampled prior to writing the scan line of information on the
4 photoconductor.

1 7. [Original] The apparatus of claim 1, wherein the scanning device
2 comprises a rotating polygon mirror.

1 8. [Original] The apparatus of claim 1, wherein the start-of-scan detector
2 assembly is disposed outside of a scan area of the photoconductor.

1 9. [Previously Presented] A laser scanning apparatus comprising:
2 a rotating scanning device configured to scan a light beam from a light
3 source;
4 a photodetector optically coupled with the rotating scanning device and
5 configured to sample the light beam from the rotating scanning device;
6 a control system configured to receive an indication of the sampled light
7 beam from the photodetector and to control a drive level of the light source
8 responsive to the indication of the sampled light; and
9 wherein the control system is configured to maintain the light source at a
10 constant drive level during scanning of a single line of information on the
11 photoconductor.

1 10. [Original] The apparatus of claim 9, wherein the light source is
2 configured to emit light in a single direction.

1 11. [Original] The apparatus of claim 9, wherein the light source
2 comprises a vertical cavity surface emission laser diode (VCSEL).

1 12. [Original] The apparatus of claim 9, wherein the control system
2 comprises processing circuitry configured to compare an indication of the
3 sampled light beam with a predetermined drive level value, and to control the
4 drive level of the light source based on the comparison.

1 13. [Canceled]

1 14. [Previously Presented] A laser scanning apparatus comprising:
2 a laser configured to generate a single light beam;
3 a scanning device configured to scan the light beam from the laser;
4 a photodetector optically coupled with the scanning device and
5 configured to sample the light beam only once per line of information scanned
6 onto a photoconductor; and
7 a control system configured to receive an indication of the sampled single
8 light beam from the photodetector and to maintain a drive level of the laser at a
9 constant drive level during scanning of the line of information onto the
10 photoconductor using the indication of the sampled single light beam.

1 15. [Previously Presented] The apparatus of claim 14, wherein the laser
2 is configured to emit a light beam in a single direction.

1 16. [Previously Presented] The apparatus of claim 14, wherein the
2 photodetector is utilized to initiate a start of scan operation of the line of
3 information.

1 17. [Original] The apparatus of claim 14, wherein the sampled light
2 beam is obtained before scanning a line of information onto the photoconductor.

1 18. [Previously Presented] A laser scanning apparatus comprising:
2 means for generating a single light beam;
3 means for scanning the light beam onto a photoconductor;
4 means for sampling the single light beam which causes information to be
5 scanned onto the photoconductor; and
6 means for receiving an indication of the sampled single light beam from
7 the means for sampling and for maintaining the means for generating at a
8 constant drive level using the indication of the sampled single light beam and
9 during scanning of the line of information onto the photoconductor.

1 19. [Previously Presented] The apparatus of claim 18, wherein the
2 means for generating comprises a laser.

1 20. [Original] The apparatus of claim 18, wherein the light beam is
2 sampled before writing a scan line of information onto the photoconductor.

1 21. [Original] The apparatus of claim 18, wherein the means for sampling
2 is disposed outside of a scan area of the photoconductor.

1 22. [Previously Presented] A laser scanning method comprising:
2 generating a single light beam using a light source;
3 providing a rotating scanning device and a photoconductor;
4 scanning the light beam along the photoconductor using the rotating
5 scanning device;
6 sampling only the single light beam from the rotating scanning device
7 using a sampling assembly; and
8 controlling the light source only using the sampling of only the single light
9 beam.

1 23. [Original] The method of claim 22, further comprising:
2 initiating writing of a scan line of information onto the photoconductor
3 using the sampling assembly.

1 24. [Previously Presented] The method of claim 22, wherein the
2 controlling comprises:
3 receiving the sampled light beam in a control system;
4 comparing an indication of the sampled light beam with a predetermined
5 drive level value; and
6 wherein the controlling comprises controlling a drive level of the light
7 source responsive to the comparison.

1 25. [Original] The method of claim 22, further comprising:
2 maintaining an output power of the light source at a constant level during
3 writing of a single scan line of information onto the photoconductor.

1 26. [Original] The method of claim 22, wherein the light source
2 comprises a vertical cavity surface emitting laser diode (VCSEL).

1 27. [Original] The method of claim 22, wherein the sampling is
2 performed only once per scan line of information written on the photoconductor
3 and prior to writing the scan line of information on the photoconductor.

1 28. [Original] The method of claim 22, wherein the sampling assembly is
2 located outside of a scan area of the photoconductor.

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1 29. [Previously Presented] A hard imaging device comprising:
2 a photoconductor;
3 a laser scanning apparatus configured to write scan lines of information
4 onto the photoconductor, the laser scanning apparatus comprising:
5 a laser configured to generate a single light beam;
6 a scanning device optically coupled with the laser and configured
7 to scan the light beam along the photoconductor to form the scan lines;
8 a sampling assembly configured to sample the light beam and to
9 generate a signal indicative of the sampling of the single light beam;
10 a control system configured to control an intensity of the light
11 beam generated by the laser responsive to the signal indicative of the sampling
12 of the single light beam; and
13 an image engine configured to form hard images from the written scan
14 lines using media.

1 30. [Previously Presented] The device of claim 29, wherein the control
2 system is configured to receive the signal indicative of only the sampling of only
3 the single light beam and to control a drive level of the light source based
4 entirely on the received signal.

1 31. [Previously Presented] An article of manufacture comprising:
2 processor-usable media comprising programming configured to cause
3 processing circuitry to:

4 output a control signal to control a light source configured to
5 generate a single light beam used to scan a plurality of scan lines of information
6 onto a photoconductor;

7 access an output of a start-of-scan detector assembly which is
8 indicative of only the single light beam, wherein the output indicates appropriate
9 timing for initiation of writing of the information for the respective scan lines;

10 process the output of the start-of-scan detector assembly; and

11 adjust the control signal responsive to the processing of the output
12 to adjust an intensity of the light beam generated by the light source.

1 32. [Original] The article of manufacture of claim 31, wherein the
2 programming is further configured to cause the processing circuitry to adjust the
3 control signal to provide the light beam having a substantially constant intensity
4 during the scanning of the scan lines.

1 33. [Previously Presented] The apparatus of claim 1 wherein the light
2 source comprises a laser configured to generate the light beam.

1 34. [Previously Presented] The apparatus of claim 33 wherein the laser
2 is configured to generate all of the photons which are sampled by the detector
3 assembly.

1 35. [Previously Presented] The apparatus of claim 33 wherein the laser
2 is configured to generate the light beam void of any light received by the laser.

1 36. [Previously Presented] The apparatus of claim 33 further
2 comprising a control system configured to provide a control signal to control the
3 drive level of the laser during the generation of the light beam, and wherein the
4 control system is configured to vary the control signal responsive to the sampled
5 single light beam.

1 37. [Previously Presented] The apparatus of claim 1 wherein the light
2 source is configured to generate an entirety of the light beam for the first time,
3 and wherein the light beam is void of any other light generated by a source
4 different than the light source.

1 38. [Previously Presented] The apparatus of claim 9 further comprising
2 the light source comprising a laser configured to generate the light beam.

1 39. [Canceled]

1 40. [Previously Presented] The method of claim 22 wherein the
2 generating comprises generating using the light source comprising a laser, and
3 the controlling comprises controlling the laser.

1 41. [Previously Presented] The method of claim 22 wherein the
2 generating comprises generating all light of the light beam using the light source.

1 42. [Previously Presented] The method of claim 22 wherein the
2 controlling comprises:
3 applying a control signal to control the light source; and
4 varying the control signal responsive to only the sampling of only the
5 single light beam.

1 43. [Previously Presented] The method of claim 42 wherein the
2 varying comprises varying to control the light source to generate the light beam
3 having a substantially constant intensity.

1 44. [Previously Presented] The device of claim 29 wherein the
2 sampling assembly is configured to initiate start-of-scan operations to write the
3 scan lines onto the photoconductor.

1 45. [Previously Presented] The apparatus of claim 9 further comprising
2 the light source, and wherein the light source is configured to only generate the
3 light beam comprising only a single light beam, the photodetector is configured
4 to sample the single light beam and to provide the indication of only the sampled
5 single light beam, and the control system is configured to control the drive level
6 of the light source only using the indication of only the sampled single light
7 beam.

1 46. [Previously Presented] The apparatus of claim 14 wherein the
2 photodetector is configured to provide the indication of only the sampled single
3 light beam, and the control system is configured to maintain the drive level of
4 the laser at the constant drive level only using the indication of only the sampled
5 single light beam.

1 47. [Previously Presented] The method of claim 18 wherein the means
2 for sampling comprises means for providing the indication of only the sampled
3 single light beam and the means for maintaining comprises means for
4 maintaining the means for generating at the constant drive level only using the
5 indication of only the sampled single light beam.